

ANNUAL REPORT
OF THE
MEDICAL OFFICER OF LONGBENTON
URBAN DISTRICT
FOR THE YEAR 1915.

JAMES ROBERT BURN, M.B., B.S., Ph. C.,
Medical Officer.



TO THE CHAIRMAN AND MEMBERS OF THE
LONGBENTON URBAN DISTRICT COUNCIL.

GENTLEMEN,—

I beg to submit my Annual Report for the year ending December 31st, 1915, upon the Health and Sanitary State of the District.

Area.—The Area of the District is unaltered at 5.349 acres, almost level, and practically no part covered by water.

Population.—According to the Census of 1911, the population was:—

1911 CENSUS.

Number of Houses.	Population.	Average per House.
2,783	12,443.	4.7.

In previous Reports, the District has been divided into two Sub-Districts, viz., Burradon (which includes Camperdown) and Longbenton.

As the miners of the District are now so much distributed over the whole area, no advantage for comparisons is to be gained by dividing up the area for the purpose of this Report, and I therefore omit statistics of sub-areas.

Sixty-two houses have been built, all at West Allotment, but only thirty were occupied by the end of December.

Four houses were closed, three of which were at Camperdown (Chapel Cottages), and one at Prosperous Pit.

Thus twenty-six more houses were occupied during the year. On an average of 4.7 inhabitants per house, this shows an increase of population of 122 over 1914. Thus the comparative numbers are :

	Number of Houses.	Estimated Population.
1914.	2,841.	12,710
1915.	2,867.	12,832.

Owing to the War, the Registrar-General has proposed that the Birth-rate be calculated on the estimated population for 1914, and the Death-rate on the estimated Civil Population for 1915, entirely excluding the military population and deaths arising therein. This estimated Civil Population (supplied by the Registrar-General) is 12,473, i.e., 359 less than that as usually estimated.

Vital Statistics for 1915 and for the five previous years will be found in Table I.

Births. — The total number of Births registered is 342 (in 1914 it was 389), equal to a Birth-rate of 26.9 per 1,000 per annum, as compared with 30.6 in 1914 and 31.7 in 1913.

Deaths. — The nett number of deaths registered is 205, as compared with 179 for 1914, and 145 for 1913, equal to a death-rate of 16.4 per 1,000 per annum (corrected for difference in sex and age constitution the death-rate is 16.6.) In 1914, it was 14, and in 1913, it was 11.5.

Infant Mortality. — The Deaths of Infants under one year of age numbered 60 (in 1914 they were 44), and the Births were 342 (in 1914 they were 389), equal to an infant mortality of 175.4 per 1,000 births; whereas in 1914 it was 113 per 1,000 births.

This large increase in Infant Mortality rate per 1,000 is due to two causes, viz., the large decrease in number of births (342 as against 389 in the previous year, and an increase of deaths due to Debility at Birth (23 from this cause in 1915 and 13 only in 1914.)

It seems fair to attribute both these adverse factors to altered conditions owing to the War.

The Notification of Births Act, 1907, came into force in September, and under its provisions Notification of Births became compulsory. The Council, in conjunction with me, carefully considered the various circulars issued by the Local Government Board with reference to the Act, and also an invitation to allow it to be administered by the Northumberland County Council, this Council to contribute rateably to its expense. As the benefits to be derived from such administration were chiefly in the direction of the employment of Health Visitors, and as, in the Council's opinion (with which I respectfully concur), there is no necessity, in this district, for their

employment, the Council decided to administer the Act themselves. The Council thought that a system of Lectures to Mothers and expectant mothers might usefully be adopted; but owing to the shortage of Medical Practitioners in the district, and the many demands made upon them, the Council decided to take no action in this direction at present.

Deaths at under 5 years numbered 96, equal to 7.7 per 1,000 (5.8 in 1914.)

Zymotic Death - Rate. — The number of deaths due to Zymotic Disease is as follows:—

Enteric Fever	Nil.
Smallpox	Nil.
Measles	7
Scarlet Fever	2
Whooping Cough	4
Diphtheria (and Membranous Croup).....	1
Diarrhoea and Enteritis (under 2 years)	5
	<hr/>
Total	19
	<hr/>

Equal to a Zymotic Death - rate of 1.52 per 1,000. In 1914, it was 1.8 per 1,000.

It will be noted that deaths from Scarlet Fever, Diphtheria and Diarrhoea are low this year.

Phthisis Death - Rate. — Twelve deaths were registered as due to Phthisis (10 in 1914), equal to a Phthisis Death - rate of .96 per 1,000. Other Tuberculous Diseases were responsible for six deaths.

Respiratory Death - Rate. — Deaths from Bronchitis, Pneumonia and Pleurisy were 30, equal to a Respiratory Death-rate of 2.4 per 1,000 (excluding Phthisis.) In 1914 it was 1.65.

Notifiable Infectious Diseases. — Table A, opposite, shews the number of cases of each Notifiable Disease notified in each month of the year, and Table II, shews the cases classified in age periods, and gives the total cases of each removed to Hospital.

The Military Cases notified were as follows: — Scarlet Fever (3), Diphtheria (2), Cerebro-spinal Fever (1), and Erysipelas (1.)

TABLE A.—Infectious Diseases Notified during the year 1915, shewing
Numbers, and months in which notified.

LONGENTON URBAN DISTRICT.

INFECTIOUS DISEASES.	JAN.	FEB.	MAR.	APRIL	MAY.	JUNE	JULY.	AUG.	SEPT.	OCT.	NOV.	DEC.	TOTALS.
Scarlet Fever	6	8	5	7	4	4	2		4	10	2	4	56
Diphtheria (including Membranous Croup) ..	1		2		1		1	1			1	1	8
Enteric Fever	1												1
Continued Fever													
Relapsing Fever													
Puerperal Fever													
Erysipelas		2	1	1	1	2			1	1	1	2	12
Small-pox		4		1	3	2		2	2	1	4	2	22
Pulmonary Tuberculosis ..	1	1		1	1	2	1		1		3		14
Other Forms of Tuberculosis	1												
Cerebro-Spinal Meningitis													
Polio-myelitis													
Ophthalmia Neonatorum						1		1					2
Cholera													
Plague													
Typhus Fever													
TOTALS ..	10	15	8	10	10	11	4	4	8	12	11	12	115

Non - Notifiable Infectious Diseases. — Of these, Measles caused 7 deaths, and Whooping Cough, 4; Influenza, 1.

SANITARY CIRCUMSTANCES OF THE DISTRICT.

No change since last year. (See Report.)

A Steam Disinfector for Scaffold Hill Hospital is still much needed and would be especially useful now, when many military cases are being treated.

PREVALENCE OF, AND CONTROL OVER ACUTE INFECTIOUS DISEASE.—Last year, 208 cases of Notifiable Acute Infectious Disease were notified, whereas this year only 114 cases have been notified, which is little more than half the number.

No genuine case of Typhoid Fever was notified.

Anti-diphtheria Serum is still supplied, with benefit, by the Council; also Carbolic and Eucalyptus Oils for the treatment and control of Scarlet Fever, and further experience makes me strongly recommend a continuance of the supply of both Serum and Oils.

West Moor Council Schools' Infant Department was closed for about six weeks in February and March on account of Measles.

PREVALENCE OF, AND CONTROL OVER TUBERCULOSIS.—Patients are advised as to the infectious nature of the disease, and sputum pots are supplied in some cases, but little further can be done at present.

MEANS FOR PREVENTING MORTALITY IN CHILD - BIRTH AND IN INFANCY.—The Northumberland County Council is the Local Authority for the purposes of the Midwives Act, 1902, and has not delegated any of its powers to the Urban Council, under Section 9 of the Act.

The Notification of Births is compulsory after the end of the year. I have already stated, in the earlier part of this Report, what action the Council has taken with regard to it.

FACTORY & WORKSHOP ACT, 1901.—The Annual Report on the Administration of this Act is appended.

BILLETING OF TROOPS IN THE DISTRICT.—(See Sanitary Inspector's Report.)

I am, Gentlemen,

Your Obedient Servant,

JAMES ROBERT BURN.

March 27th, 1915.

TABLE I.—Vital Statistics of Whole District during 1915 and previous Years.
LONGBENTON URBAN DISTRICT.

YEAR	Population estimated to middle of each year	BIRTHS.			Total Deaths Registered in the District.		Transferable Deaths.		Nett Deaths belonging to the District.			
		Un-corrected Number	Number	Rate.	Number	Rate.	of Non-residents registered in the District	of Residents not registered in the District	Under 1 Year of Age		At all Ages.	
									Number.	Rate.	Number.	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1910	16142	484	484	29.9	182	11.2	1	6	54	111.5	187	11.5
1911	12443	418	420	33.7.5	207	18.32	4	21	75	178.57	224	18
1912	12537	393	393	31.3	150	12.8	6	11	44	112	155	12.36
1913	12565	397	399	31.7	141	11.2	10	14	42	105.3	145	11.5
1914	12710	385	389	30.6	174	13.6	18	23	44	113.1	179	14
1915	12832	341	342	26.5	199	15.4	9	16	60	175.4	206	16.4

Area of District in acres (land and inland water), 5,349 acres.

Total population at all ages, 12,443. } At Census
Total families or separate occupiers, 2,783. } 1911.

TABLE II.
Cases of Infectious Disease notified during the Year 1915.
LONGBENTON URBAN DISTRICT.

NOTIFIABLE DISEASE.	NUMBER OF CASES NOTIFIED.								TOTAL CASES REMOVED TO HOSPITAL.
	At all Ages.	At ages—Years.							
		Under 1.	1 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and up- wards.	
Small-pox ...									
Cholera (C) Plague (P)	...								
Diphtheria including } Membranous croup }	...								
Erysipelas ...	8		2	4	1	1	2	3	
Scarlet fever ...	12		1	1	3	4	1		
Typhus fever ...	56		14	38	3		1	19	
Enteric fever ...	...							
Relapsing fever (R)	...								
Continued fever (C)...	...								
Puerperal fever ...	...							
Cerebro-spinal Meningitis	...								
Poliomyelitis ...	...							
Ophthalmia Neonatorum	2	2		3	5	8	3		
Pulmonary Tuberculosis	22			5	1	1	2		
Other forms of Tuberculosis	14	2							
Totals ...	114	4	23	51	13	14	8	1	
								22	

Isolation Hospitals.—Scotfold Hill, Longbenton, in the district; The Grange, Earston,
outside the district; both under Earston Joint Hospital Board.

TABLE III.

Deaths registered during the Calendar Year, 1915, classified by age and cause.

LONGBENTON URBAN DISTRICT.

Causes of Death.	Nett Deaths at subjoined ages of "Residents" whether occurring within or without the district.									Total Deaths whether of "Resi- dents" or "Non- residents" in Institutions in the District.
	All ages	Under 1 year	1 and under 2	2 and under 5	5 and under 15	15 and under 25	25 and under 45	45 and under 65	65 and upwards	
All causes { Certified { Uncertified	204 2	58 2	12	24	8	8	21	34	39	9
Enteric Fever										2
Small-pox										
Measles	7		2	5						
Scarlet Fever	2			2						2
Whooping-Cough	4	3	1							
Diphtheria and Croup	1						1			5
Influenza	1					1				
Erysipelas										
Phthisis (Pulmonary Tuberculosis)	12			2		3	5	2		
Tuberculous Meningitis	4	1	1	1	1					
Other Tuberculous Diseases	2				2					
Cancer, malignant disease	5						2	1	2	
Rheumatic Fever										
Meningitis										
Organic Heart Disease	14					1		6	7	
Bronchitis	19	4	1	6			1	4	3	
Pneumonia (all forms)	9	1	2	1	3		1		1	
Other diseases of Respiratory organs	2						1		1	
Diarrhoea and Enteritis	6	4	1	1						
Appendicitis & Typhlitis	1						1			
Cirrhosis of Liver	4						2	2		
Alcoholism										
Nephritis and Bright's Disease	8						1	7		
Puerperal Fever										
Other accidents and diseases of Pregnancy and Parturition	1						1			
Congenital Debility and Malformation, inclu- ding Premature Birth	40	40								
Violent Deaths, Excluding Suicide	6		1		1	1	2		1	
Suicides	1						1			
Other Defined Diseases	57	7	3	6	1	2	2	12	24	
Diseases ill-defined or unknown										
TOTALS ...	206	60	12	24	8	8	21	34	39	9

TABLE IV.

Infant Mortality.

LONGBENTON URBAN DISTRICT.

1915. Nett Deaths from stated causes at various Ages under 1 Year of Age.

Causes of Death.		Under 1 week	1-2 weeks	2-3 weeks	3-4 weeks	Total under 4 weeks	4 weeks & under 3 months	3 months and under 6 months	6 months and under 9 months	9 months and under 12 months	Total Deaths under 1 year
All causes	{ Certified Uncertified	15	2	5		22	17	7	5 2	7	58 2
{ Small-pox											
{ Chicken-pox											
{ Measles											
{ Scarlet Fever											
{ Whooping-cough							2			1	3
{ Diphtheria and Croup											
{ Erysipelas											
{ Tuberculous Meningitis										1	1
{ Abdominal Tuberculosis											
{ Other Tuberculous Diseases											
{ Meningitis (not Tuberculous)											
{ Convulsions		1	1			2		3	1		6
{ Laryngitis										1	1
{ Bronchitis				1		1		2		1	4
{ Pneumonia (all forms)							1				1
{ Diarrhœa							2	1		1	4
{ Enteritis											
{ Gastritis											
{ Syphilis											
{ Rickets											
{ Suffocation, overlying											
{ Injury at birth											
{ Atelectasis		1				1					1
{ Congenital Malformations							1				1
{ Premature Birth		11	1			12	2				14
{ Atrophy, Debility and Marasmus		2		4		6	9	1	5 1	2	23 1
{ Other causes											
Totals		15	2	5		22	17	7	7	7	60

Nett Births registered during the calendar year { legitimate, 327.
illegitimate, 14.

Nett Deaths registered during the calendar year of { legitimate Infants, 58.
illegitimate Infants, 2.

**ANNUAL REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE YEAR 1915
FOR THE URBAN DISTRICT OF LONGBENTON.**

On the Administration of the Factory and Workshop Act, 1901, in connection with
Factories, Workshops, Workplaces, and Homework.

1.—INSPECTION OF FACTORIES, WORKSHOPS AND WORKPLACES
Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

Premises. 1	Number of		
	Inspections. 2	Written Notices. 3	Prosecutions. 4
FACTORIES (Including Factory Laundries)	3		
WORKSHOPS (Including Workshop Laundries)	54		
WORKPLACES (Other than Outworkers' premises included in Part 3 of this Report.)		...	...
Total	57	0	0

2.—DEFECTS FOUND IN FACTORIES, WORKSHOPS AND WORKPLACES.

Particulars. 1	Number of Defects.			
	Found. 2	Remedied. 3	Referred to H.M. Inspector. 4	Number of Prosecutions. 5
<i>Nuisances under the Public Health Acts:—</i>				
Want of Cleanliness				
Want of Ventilation
Overcrowding				
Want of Drainage of Floors				
Other Nuisances				
Sanitary Accommodation { insufficient				
{ unsuitable or defective
{ not separate for sexes				
<i>Offences under the Factory and Workshop Acts:—</i>				
Illegal occupation of underground bakehouse (s. 101)				
Breach of special sanitary requirements for bakehouses (ss. 97 to 100)
Other offences				
(Excluding offences relating to outwork which are included in Part 3 of this Report)				
Total

3.—HOME WORK. Nil.

4.—REGISTERED WORKSHOPS.

Workshops on the Register (s. 131) at the end of the year. 1	Number. 2
Bakehouse (none underground)	15
Dressmakers, Milliners, Knitting Machine Worker, Needle Worker on Outworkers' list, Blacksmiths, Tailors, Boot and Shoe Repairers, Builders, Joiners, and Tinsmiths *	38
Workshop Laundry	1

5.—OTHER MATTERS. Nil.

March 27th, 1916.

(Signature), **JAS. ROBT. BURN**, Medical Officer of Health.

* See Inspector of Nuisances' Report for details.

Longbenton Urban District Council.

County of Northumberland.

ANNUAL REPORT

OF THE

INSPECTOR OF NUISANCES

FOR THE YEAR 1915.

GENTLEMEN,—

Scavenging of House Refuse during 12 Months Ending March 31st, 1915.— This work was carried out regularly by the Council's employees during day time. The ashpits were cleansed 13 times during the year, ash-closets once every week, and in some instances twice a week. Ash-bins were cleansed once a week. The quantity of refuse removed was 17,470 loads, or 21,837 cube yards. This is an increase of 1,000 cube yards as compared with last year.

Houses Occupied by the Civilian Population.— The total cost of scavenging of houses occupied by the Civilian Population amounted to £980 3s 4d. The average cost per house = 6s - 10d., and the cost per person, 1s - 6.3d. Included in these expenses are £18 5s 0d rental for refuse depots.

The decrease per house = $7\frac{1}{2}$ d.

Although we are now scavenging 544 more houses than the scavenging contractors used to do, the total extra cost is only £33 14s 10d. It is also satisfactory to note that had this work been carried out by Contractors, the cost would have totalled £1,163 11s 6d. The increase would have been £183 8s 2d.

About 40 per cent. of the refuse was conveyed to the refuse depots in the district, the remainder being tipped upon the land and ploughed in by the farmers.

Removal of Trade Refuse. — 340 sacks of shop refuse were removed, the cost being approximately $1\frac{1}{2}$ d. per sack. This is a decrease of 93 sacks as compared with last year.

Refuse Depots. — There are three depots in the district, as follows:—Burradon (near colliery); Prospect Hill Quarry and Billy Pit, Benton. An annual rental is paid for each. The dry refuse, removed from Forest Hall and Benton, where the water-closet system is chiefly in use, is tipped at Billy Pit, where a 6 ft. wire fence is erected to burn paper in.

Sanitary Conveniences. — The following is a list, giving the number in existence in each Ward:—

	Water- Closets.	Ash- Closets.	Ashpits in combination with Privies.	Privies.	Separate Ashpits.	Galvanised Iron Dust Bins.	Other Receptacles.	Privy Pails.
Allotment Ward ...	15	198	140	285	6	1	...	...
Benton Ward ...	366	71	32	38	129	196	39	...
Burradon Ward ...	30	369	23	34	20	4	1	...
Forest Hall Ward...	299	360	59	81	105	177	9	4
Killingworth Ward	102	308	59	93	50	43	9	2
Totals	812	1306	313	531	310	421	58	6

In connection with 62 new buildings completed during the year, 4 Water-closets, and 58 Ash-bins have been provided.

In connection with existing property, the following have been abolished:—15 Privies, 8 Ashpits in combination with privies, and in their place 15 Water-closets, 3 separate Ashpits and 7 Dust-bins. One of the Privies and Ashpits are in connection with three cottages closed at Burradon.

During the year, 28 Statutory Notices were served upon Owners under Sec. 36 of the Public Health Act, 1875, as follows:—

- 9 to provide Water-closets in place of Insanitary Privies, &c.
- 8 Ash-closets in place of Insanitary Privies, &c.
- 9 .. Repair Defective Sanitary Conveniences.
- 2 .. Provide Ash-bins.

Fourteen of these Notices were complied with. In connection with eleven where the owners failed to comply, the Council decided to obtain Tenders and do the work themselves and charge such owners with the cost. Tenders were received in nine of the cases (the other two being obtained at the close of the year.) After consideration, the Council decided to postpone the work until after the War, with an understanding that the Owners would then proceed to carry out the requirements as set down in the Notices. This decision was arrived at on account of the scarcity of labour and the abnormal prices of materials.

Drainage Works.—Twelve houses were found to have defective drains. Eight systems of drains were entirely re-laid. The others were repaired and made smoke-tight. The work was carried out in accordance with the new bye-laws of this Council. In all, 17 water tests and 34 smoke tests were applied, and 68 inspections made while the work was in progress. See Table III.

Drainage Works on New Buildings.—Thirty-eight new systems of drains were inspected; 4 extensions to existing drains were carried out and inspected; 97 water tests and 58 smoke tests were applied, and 108 inspections made. See Table IV.

Slaughter-Houses.—Bye-laws having been approved by the Local Government Board towards the close of 1914, these were circulated among the slaughterers of the district. Their premises were inspected with a view to granting licenses and registration.

Four have been licensed for a period of two years.

The license of one has been granted for one year only, on condition that certain alterations, &c., be carried out before the date of renewal.

Owing to the unsatisfactory condition of other four premises, the owners were informed that until the defects were remedied, the licenses will be withheld.

The slaughter-houses were systematically inspected during the year.

Dairies, Cowsheds and Milkshops Order, 1885, and the Contagious Diseases (Animals) Act, 1885.—Each Cow-keeper, Dairyman, and Purveyor of Milk has been supplied with

a copy of the new Regulations made under the above Order. There are 28 Cow-keepers and Dairymen, and 4 Purveyors of Milk in the Council's area.

One purveyor was registered during the year.

The total number of cows when last inspected was 318. Seventy-seven inspections were made of the various premises. Two Statutory Notices were served upon Cow-keepers to cleanse the cows, limewash the byres, and remove large accumulations of manure from close proximity to the byres and dairies. Both have been complied with.

Eight Informal Notices were served to cleanse and lime-wash byres. These were speedily complied with.

At White Hall Cottage, Little Benton, two Trellis Windows were provided.

At Benton Place Farm the byre has been partly cemented and more ventilation provided in one byre. Another byre has been improved by the provision of four new windows.

A preliminary notice was served to remove a drain with an opening direct in a cowshed.

Housing (Inspection of District) Regulations, 1910.

—Owing to increased duties in attending the Scavenging, &c., of the Billets and Camp occupied by the Military, no new inspections were made during the year under the above regulations. Many re-inspections were made to premises already reported and unfinished during 1914.

At Fanshaw House many improvements were carried out. This is a large house let into eight tenements. Each tenant was provided with better food storage, more ventilation, and new hand-rails were provided to staircase. A damp cement floor downstairs was replaced with wood. More light and ventilation were provided to two small rooms upstairs. Three insanitary privies, one open ashpit, and many old wooden coal-houses were replaced with four water-closets, one properly-constructed and covered-in ashpit, and eight coal-houses. The unpaved wash-house floor was paved with cement concrete, and the water was laid inside of same. The unpaved yard was paved with tar-macadam, cement footpath, and channel. A new drainage system was laid and the old pipes removed. The roofs and rain-water gutters were also repaired.

In connection with houses at Fryer's Terrace, Camperdown, 16 Closing Orders were served at the beginning of the year in order to try and induce the owners to remedy the worst defects. New windows and doors in the back walls of some of the houses at the east side, and a cement area next to such walls with the necessary drainage have been provided. At the end of the year, 9 ash-closets were being converted into 9 water-closets, and 2 properly-constructed ashpits were being built. The latter was near completion at the

end of the year. Owing to the scarcity of labour and the abnormal price of material, the rest of the works at this and other properties are allowed to lie in abeyance until after the War.

Preliminary Notices were served upon the owners of three cottages at Camperdown (Chapel Cottages) to carry out extensive repairs and alterations to render same fit for habitation. The owners decided to close the premises, and at the close of the year they were being demolished.

The 71 houses at Benton Square, Wapping Square, Prosperous Pit, and Richardson's Buildings, West Moor, are in the same condition as reported last year.

Three Closing Orders were served upon the owners of Prosperous Pit Cottages, and two Notices of Closing Orders having become operative were served upon two of the tenants, one being closed at the time of service of latter notices.

- 75 Re-inspections were made during the year.
- 19 Closing Orders served.
- 8 Houses have been made fit for habitation.
- 4 Houses have been closed.
- 3 Houses have been demolished.

Insanitary Houses. — The owners of Colliery Property at West Moor, Camperdown and Burradon have postponed carrying out certain repairs and alterations, as requested by the late Council, until after the War.

At Burradon, one damp floor has been re-laid with wood.

Houses without a Proper Water Supply. — The following houses are without a proper supply from the water mains:—

Prosperous Pit Cottages	3
Paddock Hall or East Farm	1
Hope Cottage and Hope Pit	2
* Holystone Gardens and Cottages ...	4

10

* The Owner of this Property arranged with the Water Company to provide a supply under pressure, but owing to the scarcity of labour and having to lay water mains and services into many Military Camps, Hutments, and Billets, they advised her to employ her own plumbers to do the work. At the time of writing this Report, Tenders are being obtained for the works necessary.

Infectious Diseases.—I received 71 notifications from the Medical Officer of Health, as follows:—

Scarlet Fever	55
Diphtheria	8
Erysipelas	8
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	71
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Houses in which Infectious Diseases are being isolated are marked by large red letters "S" for Scarlet Fever; "D" for Diphtheria; "E" for Enteric Fever; and "M" for Measles.

Acting on his instructions, 22 were removed to hospital. After removal to hospital and the recovery of patients at home, 66 rooms in 60 houses were fumigated with Formic-aldehyde. One of this number was after a case of Tuberculosis.

Petroleum Acts.—Two licences have been renewed. These Stores are in accordance with the Regulations.

Factories & Workshops Act, 1901.—The following is a list of Factories and Workshops in this district:—

Bakehouses (none underground)	15
Dressmakers	16
Milliners	2
Knitting-machine Worker	1
Needle-workers (on out-workers' list) ..	1
Workshop Laundry	1
Blacksmiths	4
Tailors	2
Boot and Shoe Repairers	4
Builders and Joiners, and Plumbers ..	7
Tinsmith	1
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Total Number of Workshops...	54
„ „ „ Factories ...	3
	<hr/>
	57
	<hr/>

These were systematically inspected during the year.

Streets and Roads. New Street Works are required at :—

FOREST HALL: Forest Avenue, Crossley Terrace, Percy Street, Young's Road, Errington Terrace and Nicholson's Terrace back street.

SOUTH GOSFORTH:—Killingworth Road and Gallalaw Terrace.

WEST ALLOTMENT:—West Street, Earsdon Terrace, Holywell Terrace, and the paths in front of Eccles, Carlisle, Maude, Lamb, Buddle and Griffith Terraces.

CAMPERDOWN:—Back Streets at Station Road, Atkin Street, and Garden Terrace.

BENTON:—Tynedale Terrace and Eastfield Terrace.

A Local Government Inquiry has been held in connection with the above streets, except Errington Terrace, Tynedale, and Eastfield Terraces.

Bye - laws and Regulations.—The following are now in force in this district :—

- (1) New Streets and Buildings.
- (2) The Drainage of Existing Buildings.
- (3) Slaughter - houses.
- (4) Dairies, Cowsheds and Milkshops.
- (5) For the Prevention of Nuisances from the keeping of Animals.

A large number of nuisances were abated forthwith on verbal notices to the persons responsible.

Military Billets, &c.— **COLLECTION & DISPOSAL OF REFUSE.** Every assistance was given to the Military Authorities in connection with the scavenging, &c., of the Camp, Hutments, and Billets. The latrines and urinal cesspools upon the camp ground at Longbenton were cleansed daily. The latrines at the Hutments and Billets are also cleansed daily. At one Hutment, where there was an insufficient supply of latrines owing to a change in the troops, these were scavenged twice a day until more buckets were supplied. The refuse from the incinerators is removed three times per week. At the Camp the old tins were removed daily. The excreta from

the latrines is removed to three tips. At one of these places, it is ploughed into the land within 24 hours of deposit. The other two depots are not within 200 yards of any highway, house, or camp. These are also used as tips for refuse from houses at West Moor (a colliery village.) The ashes from this place effectually neutralise the refuse from the camp and billets, which naturally is of a very sloppy nature.

WATER - CLOSETS & LATRINES. — Representations were made to the Military Authorities by the Local Government Board and this Sanitary Authority asking for the Water-carriage system at each of the Hutments, as drains were laid in to each field and were within a few yards of the latrines. With the exception of one billet, viz., Forest Hall and Benton Assembly Rooms, the latrines still exist. At the Assembly Rooms, a sort of trough closet was provided, as the latrines were in close proximity to large business premises and adjoining the highway. This trough closet is formed by means of a 9 in. glazed earthenware channel with a riser back and front above it built with $4\frac{1}{2}$ in. brick-work rendered inside with cement. It retains 2 in. of water, and the invert is 2 ft. 6 in. below the seat. The width between the front and back riser is only 9 inches. It is flushed by means of an automatic flushing tank. The back and front risers get very much soiled, and have to be scrubbed every morning by the pioneers on duty. The flush from the tank only comes into contact with the glazed channel. The latrines are erected as far as possible from the kitchens in order to avoid risk of contamination of the food from dirt or mud which might be carried upon the men's boots, but in three instances they are next to the highway.

WATER SUPPLY. — All Billets, Hutments and the Camp have a Water Supply under pressure. Each Hutment has a separate service pipe and meter fixed to supply the kitchens, wash-houses, and spray-baths, &c. A 4 in. cast-iron pipe was laid on the south, east and west sides of the Camp ground, with 1 in. branch supplies to kitchens, spray-baths, and ablution benches. Fire hydrants and drinking troughs for horses were also provided at this place.

DRAINAGE. — Each Hutment is separately drained into the Council's sewer, and all Billets are also drained into the same. With regard to the Camp drainage, this was most unsatisfactory. The drainage from the ablution benches, spray-baths and kitchens discharged into a small runner within a few feet of some of the camp kitchens in which meat was constantly hung, notwithstanding the fact that the Council's sewer existed upon the west and south side of the camp ground. This runner flowed along the low side of the camp and joined a larger stream which forms a tributary to the Ouseburn. This watercourse was in a most polluted condition with greasy, dirty and soapy water from the kitchens.

ABLUTION TROUGHS, &c. For fully one mile the burn was an almost stagnant mass of dark grey and black sewage. The Military Authorities were informed that when a period of dry weather came, this runner would contain a very small quantity of surface water, and that not only would a serious nuisance arise from the accumulation of putrescent animal and vegetable matter, but that a most favourable breeding ground for flies would exist, with consequent danger to the troops. Suggestions were made for remedying these conditions, but as no action was taken by those responsible for the nuisance, the conditions were reported to the Deputy - Director of Medical Service at York. Levels were taken and plans prepared to prove that this sewage could be discharged into the Council's sewer at reasonable cost. Subsequently a deputation had an interview with the Military Authorities at York. Instead of laying drains and connecting same to the sewer, an installation was laid down and the drains from the camp connected therewith. The installation consists of one rectangular and three circular chambers through which the sewage flows. In the first chamber it is treated with a small quantity of lime, and after passing through the other three chambers it is automatically discharged by a syphon into the runner. The effluent was extremely unsatisfactory, and the stream was very little better than before the installation was laid down. The stench from the stream at a point one mile farther down than the camp was very pronounced, although considerable dilution had taken place from another burn which joins it before reaching this point. The contents of the burn had the appearance of weak sewage, and the bed was thickly coated with sewage fungus. I strongly recommend that, before this camp is again occupied, the Military Authorities be again requested to connect the drains to the Council's sewer.

URINALS. — These were drained into 40-gallon tar casks sunk into the ground adjoining the latrines, which were erected along the north side of the camp ground. There were 30 of these cesspools. These were pumped out daily into an iron water-cart, which was emptied into the sewer by means of a 9 in. discharge valve. It is my opinion that these urinals ought to be at the south side of the field and drained into the sewer, because in the emptying of these cesspools, much expense is incurred, and although great care may be taken, some of the liquid filth is spilled upon the ground.

INFECTIOUS DISEASE & DISINFECTION. All cases of Infectious Disease were removed by the Military Authorities to Hospital. When such cases were removed from a Billet, the room or hut was disinfected with Formalin and thoroughly cleansed. At the Camp, the infected tents and contents, as well as all contacts,

were removed to another part of the ground. The latter were isolated, and after a sufficient time had elapsed, these tents, etc., were sprayed with Formalin. It is satisfactory to note that very few cases occurred among the troops in this area.

After the latrines and cesspools are cleansed, these are thoroughly disinfected with Chloride of Lime by the Sanitary Squad of each Battalion or Company. A portable steam disinfecter was brought periodically to the Billets, Hutments, and Camp, and bedclothes, etc., were disinfected.

I am, Gentlemen,

Your Obedient Servant,

Wm. BEAN, C.R.S.I.,

Inspector of Nuisances.

February 24th, 1916.

TABLE No. 1.

ESTIMATED POPULATION. 12,565.	* Housing.			Drainage		Sanitary Conven- iences.		Slaughter- houses.	Bakehouses.	Other Workshops.	Nuisances from keeping of Animals.	Paving of Yards.	Other Nuisances.	TOTAL.
	Unfit for Human Habitat.	Overcrowding.	Dampness.	Choked.	Insufficient.	Insufficient.								
Number of Inspections made...	14	37	23	104	114	116	77	29	15	39	65	92	55	750
Number of Defects or Contra- ventions of Byelaws found...	1	5	6	32	13	41	14	6	1	..	14	65	18	216
Number of Informal Notices by Inspector	1	5	6	32	13	24	14	6	1	..	14	48	13	142
Number of Defects or Contra- ventions remedied after In- formal Notice	3	11	4	31	11	48	14	1	1	..	19	3	..	146
Number of Statutory Notices served by Local Authority ...	..	2	..	2	4	22	2	..	..	..	2	6	..	46
Number of Defects or Contra- ventions remedied after Statu- tory Notice	1	2	..	2	2	13	2	..	..	..	8	1	..	31

* These Statistics do not include the houses inspected under the Housing (Inspection of District) Regulations, 1910.

+ One of these Notices was served upon the owners of 58 Houses where the yards are unpaved.

¶ Six of these cases of overcrowding were reported in 1914 Annual Report.

TABLE II.

Details relating to certain works carried out in the Abatement of Nuisances.

Ash Closets Abolished.	Privies Abolished.	Combined Ashpits Abolished.	Water Closets Substituted.	Ash Closets Substituted.	Separate Ashpits Provided.	Dust Bins Provided
Nil.	14	8	15	Nil.	3	8

TABLE III.

Details relating to certain works carried out in the Re-laying of Defective Drains.

Yards of Glazed Earthenware Pipes.	Gullies, Anti-Bell Traps and Disconnecting Traps.	Inspection Chambers Provided.	Yards of Cast-Iron Soil-Pipes and Vent-Shafts.	Water-Closets Re-fixed.	Water-Tests Applied.	Smoke Tests Applied.	Visits Paid.
294	29	7	54	5	17	34	68

TABLE IV.

Details relating to certain works carried out in the Provision of Drains to New Buildings.

Yards of Glazed Earthenware Pipes Laid.	Gullies, Anti-Bell and Disconnecting Traps Fixed.	Inspection Chambers Provided.	Yards of Cast-Iron Drain Pipes, Soil Pipes and Vent-Shafts.	Water-Closets Provided.	Water-Tests Applied.	Smoke Tests Applied.	Visits Paid.
382	83	Nil.	16	4	97	58	108

Housing (Inspection of District) Regulations, 1910.

Number of Dwelling-houses Inspected.	Number found to be unfit for Habitation.	Closing Orders.		Number of Houses where defects were remedied without Closing Orders being made.	Number of Houses rendered fit for Habitation after making Closing Order.	Number of Houses demolished.		General Character of Defects found to exist.
		Number of representations made to Local Authority.	Number of Closing Orders made.			Under Demolition Orders.	Voluntary by Owners.	
.....	19	19	8	8	.....	3	Damp Walls and Floors. Insufficient light & ventilation. Defective rain-water gutters. Defective staircases. Unpaved areas. Insanitary privy middens.

REMARKS.—1 House was closed after Statutory Notice was served.

Newly-occupied Houses during 1915:—

Hartley Terrace (W. Allotment)	...	...	...	...	11
Delaval Terrace (W. Allotment)	...	...	...	...	3
Cramlington Terrace (W. Allotment)	...	...	...	...	1
Burradon Terrace (W. Allotment)	...	...	...	...	8
Seaton Terrace (W. Allotment)	...	...	...	...	2

30